EHS–International, Inc.

13228 NE 20th Street, Suite 100
Bellevue, Washington 989005-2049
Phone 425-455-2959
Toll Free 800-666-2959
Fax 425-646-7247

April 03, 2014

Mr. Garrett Condel
Sellen Construction
227 Westlake Avenue North
Seattle, WA 98109

Subject: **LEED EQ Cr. 3.2– Indoor Air Testing**
The Park Place Building – Floor 16
1200 Sixth Avenue, Seattle, Washington
EHSI Project 10605-01

Dear Mr. Condel:

At your request, EHS-International, Inc. (EHSI), an environmental health and safety consulting firm, conducted indoor air testing in support of LEED EQ Credit 3.2, (CI) on the 16th Floor of The Park Place Building located at 1200 Sixth Avenue, Seattle, Washington. Sampling was conducted on April 2nd, 2014 and analytical results were expedited. The results, conclusions and recommendations are included in the attached report.

EHSI is pleased to provide our professional industrial hygiene services. If you have any questions concerning this report or if EHSI can provide further services to you, please call me at (425) 455-2959.

Sincerely,

EHS-International, Inc.

Clinton Holzhauer, LEED AP, CMC
Manager, Indoor Air Quality Services

Floor 16
The Park Place Building
LEED EQ Credit 3.2—(CI) Air Testing Results

The Park Place Building
1200 Sixth Avenue, Seattle, Washington

Prepared for:

Mr. Garrett Condel
Sellen Construction
227 Westlake Avenue North
Seattle, WA 98109

April 3, 2014
EHSI Project 10605-01

EHS–International, Inc.

13228 NE 20th Street, Ste. 100
Bellevue, Washington 98005
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EHS-International, Inc.

Indoor Air Quality Consulting & Building Investigations

13228 NE 20th Street, Ste. 100 Bellevue, WA
(425) 455-2959 • Fax (425) 646-7247
www.ehsintl.com

Results of Indoor Air Quality Testing in Park Place Building

Floor 16

1200 Sixth Avenue, Seattle, Washington
For LEED IEQ Credit c3.2

EXECUTIVE SUMMARY

EHS-International, Inc. (EHSI), an environmental health and safety consulting firm, conducted indoor air quality (IAQ) testing in a newly renovated fitness center room on the Sixteenth (16th) floor of the Park Place Building, located at 1200 Sixth Avenue, Seattle, Washington, on April 2nd, 2014. The purpose of the testing was to determine whether the space is in compliance with the indoor environmental quality (IEQ) standard IEQ Credit c3.2 established by the United States Green Building Council (USGBC) for LEED® for Commercial Interiors (CI) 2009.

EHSI accomplished LEED® IAQ sampling in one (1) indoor location on the 16th floor. Sampling included using hand-held instruments to directly read and data-log concentrations of carbon monoxide (CO) and airborne particulates less than 10 microns in diameter (PM10) and collecting samples for laboratory analysis of airborne concentrations of total volatile organic compounds (TVOCs), formaldehyde and 4-phenylcyclohexene (4-PCH).

Results from the sampling indicate that concentrations of CO, PM10, TVOCs, formaldehyde and 4-PCH were all less than the maximum allowable values established by LEED®.

These results indicate that the newly renovated sixteenth (16th) floor in the Park Place Building has passed the Indoor Environmental Quality Tests for LEED IEQ Credit c3.2.

BUILDING CONDITIONS DURING TESTING

- The renovation of the 16th floor was essentially complete at the time of testing with only some apparent touch-up work remaining. Work stations were in place and fully assembled.
- The 16th floor has a footprint of less than 13,000 square feet and one air handling unit provides conditioned air to the space.
- The samples were collected between 3 and 6 feet above floor level and sample collection took place over a four hour period.
- All samples were collected between 8:00 am and 12:00 pm.

A letter provided by the MacDonald-Miller Facility Solutions HVAC system specialist stating that the heating, ventilating and air conditioning (HVAC) system "started at the normal daily start time and operated at the minimum outside air flow rate for the occupied mode throughout the test" is presented in an appendix to this report.

TESTING SCOPE & METHODS USED

Based on the LEED® requirements one (1) location on the 16th floor was chosen for testing. The LEED® requirements are based on square footage and the number of ventilation systems. Testing was conducted in the following location:

- Floor 16 – Open Office Area – South side of floor (Between J/K and 12/13 in center of workstation)

A floor plan denoting the sampling location is included in Appendix A.

EHSI tested for carbon monoxide (CO), airborne particulates less than ten microns in diameter (PM10), total volatile organic compounds (TVOCs), formaldehyde and 4-PCH.

Real time measurements were made of carbon monoxide (CO) and fine airborne particulates less than 10 microns in diameter (PM10). The measurements were obtained using a calibrated TSI Q-Trak indoor air monitor for CO and a calibrated TSI Dust-Trak for PM10. Data was logged every minute over a four-hour period. Additional information for CO is provided in Appendix B and additional information for PM10 is located in Appendix C. Calibration data for the direct read instruments used is included in Appendix D.

4-PCH was sampled using an SKC charcoal tube (226-001) and a low flow personnel sampling pump calibrated to sample at a rate of 0.20 liters per minute. The collected sample was transferred to Galson Laboratories (Galson) in East Syracuse, New York, under chain-of-custody control and analyzed in accordance with modified NIOSH 1501 using gas chromatography with a photoionization detector (GC/PID). All analytical tests were conducted on a "same day" turn-around-time basis.

TVOCs were sampled using a one-liter evacuated SUMMA canister with a 4-hour regulator. The sample was submitted, under chain-of-custody control, for analysis to Galson. Samples were analyzed in accordance with modified OSHA PV2120/modified EPA TO-15 using GC/MS.

Formaldehyde was sampled using a N580 Assay passive monitoring badge with both face plates removed. The monitoring badge was submitted, under chain-of-custody control, for analysis to Galson. Samples were analyzed in accordance with modified OSHA 1007 using High Performance Liquid Chromatography (HPLC) with Ultraviolet light (UV).

The Galson laboratory analytical test results report for TVOCs, 4-PCH and formaldehyde is included in

Appendix E. EHSI Field Data sheets are presented in Appendix F. The letter from the MacDonald-Miller Facility Solutions HVAC System Specialist is included in Appendix G.

Sampling was conducted by Mr. Clinton Holzhauer, EHSI Manager of Indoor Air Quality Services, on April 2nd, 2014. All samples were collected at a height of 3 to 6 feet from the floor. Laboratory results were expedited.

TEST FINDINGS

The results from testing, presented in micrograms per cubic meter (ug/m^3), parts per billion (ppb) or parts per million (ppm) are listed in Table 1.

Table 1
TVOCs, PM10, CO, Formaldehyde and 4-PCH
16th Floor
April 2, 2014

Sampling Location	TVOCs (ug/m^3)	PM10 Particulates (ug/m^3)	CO (ppm)	Formaldehyde (ppb)	4-PCH (ug/m^3)
Date & Time	April 2nd 8:00 – 12:00	April 2nd 8:00 – 12:01	April 2nd 8:01 – 12:06	April 2nd 8:00 – 12:00	April 2nd 8:00 – 12:00
Floor 16 Cubical center of room South side of Floor	230	17	0.0	<20	<4
LEED Maximum Allowable	**500**	**50**	**9**	**27**	**6.5**

< = less than

CONCLUSIONS

Results from air testing on the newly renovated 16th Floor of the Park Place Building, located at 1200 Sixth Avenue, Seattle, Washington, indicate that the space had concentrations of carbon monoxide, formaldehyde, TVOCs, PM10 and 4-PCH that were below the maximum allowable concentrations established by LEED®.

These results indicate that the 16th Floor has **passed** the Indoor Environmental Quality Tests for LEED® IEQ Credit 3.2 CI.

LIMITATIONS AND STANDARD OF CARE

This testing was conducted by EHS-International, Inc. in accordance with the scope of work defined by EHSI proposal 13-018 and the USGBC LEED Reference Guide, 2009 Edition. EHSI followed currently accepted industrial hygiene practices, including professional opinions based on observations and laboratory data obtained. Other than this, no warranty is implied or intended.

APPENDIX A

FLOOR PLAN WITH SAMPLING LOCATION

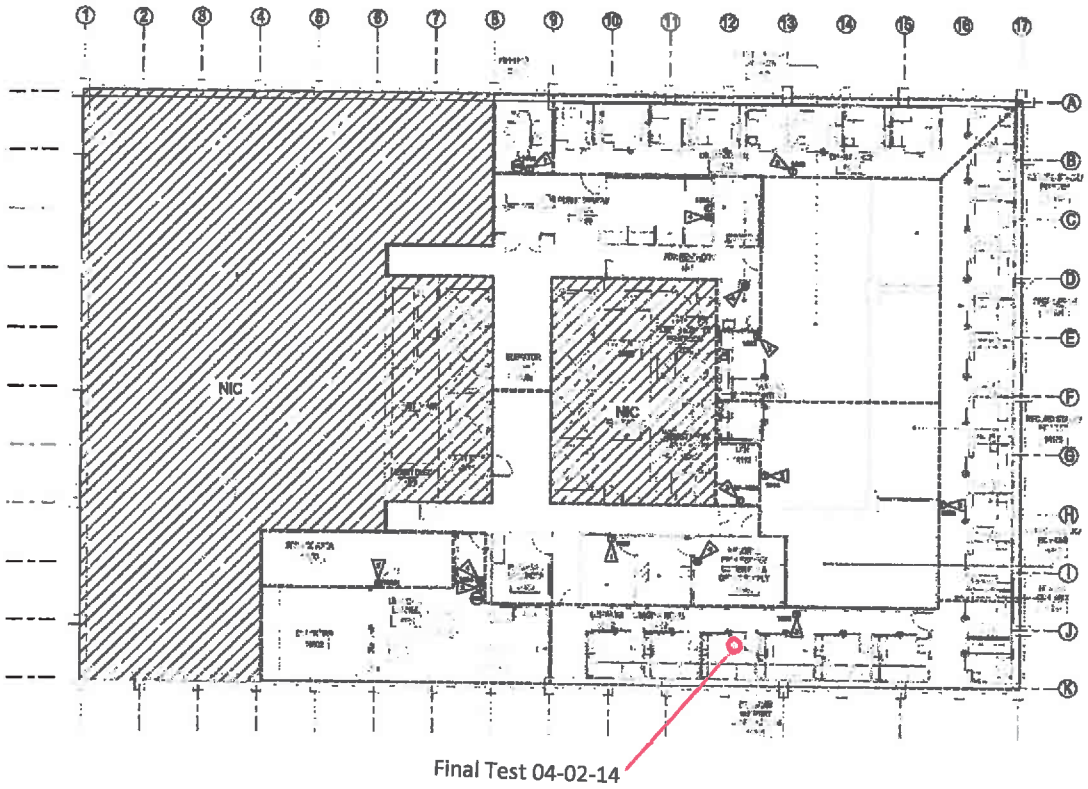
IAQ SAMPLING LOCATION
FLOOR 16

SHEET NOTES:

1. [illegible]
2. [illegible]

FLAG NOTES:

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]



EPA - REGION 10

1200 6th Ave.
Levels 10-16 & 18-21
Seattle, WA 98101

Gensler

EPA - REGION 10

HVAC ZONE PLAN - 16TH FLOOR

M03.16A

HVAC ZONE PLAN - 16TH FLOOR

1

APPENDIX B

CARBON MONOXIDE (CO)

The Park Place Building
Floor 16
April 2, 2014

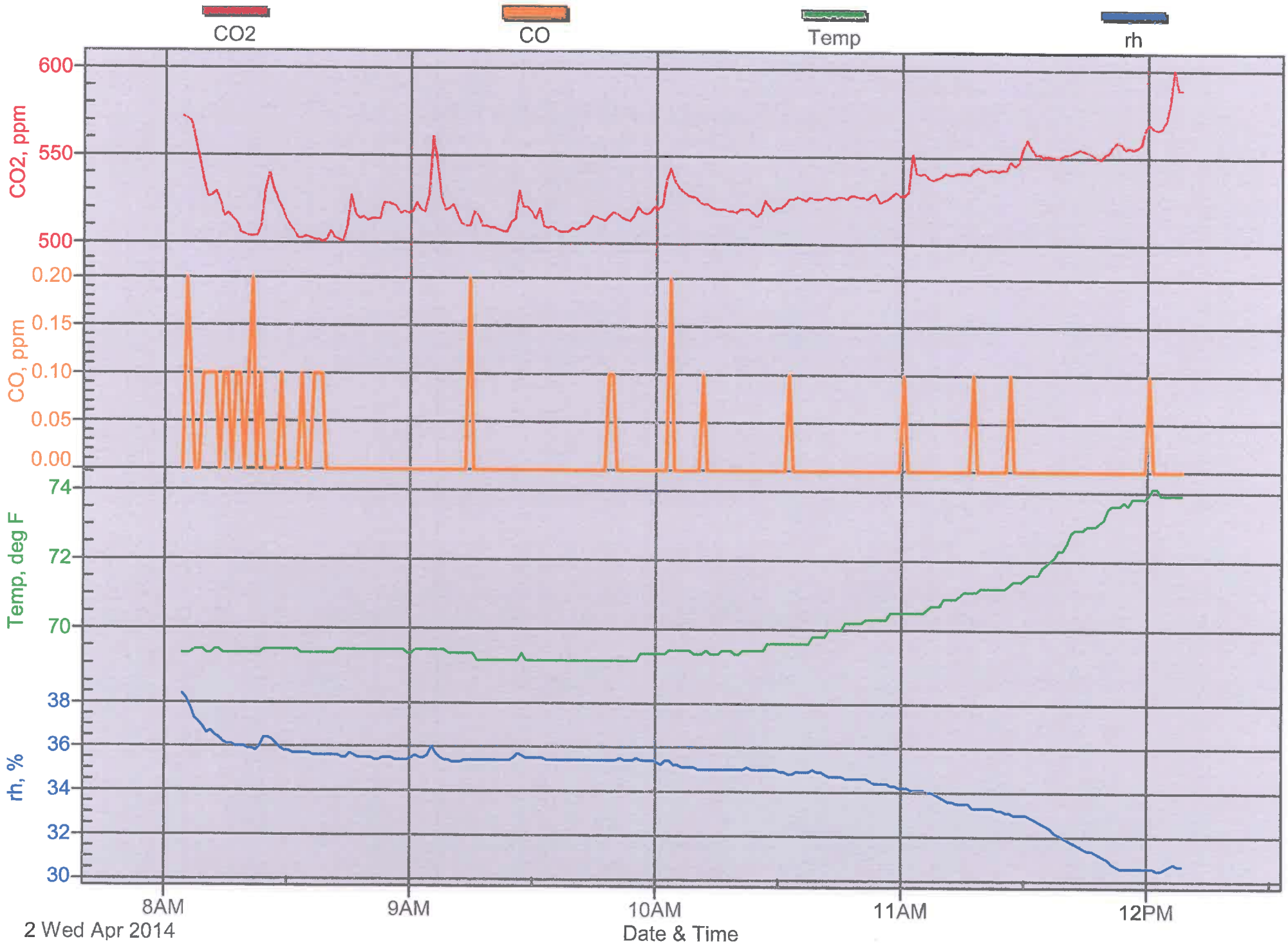
Carbon Monoxide

Instrument		Data Properties	
Model	Q-Trak Plus	Start Date	04/02/2014
Meter S/N	8554-08061026	Start Time	08:03:25
		Stop Date	04/02/2014
		Stop Time	12:08:25
		Total Time	0:04:05:00
		Logging Interval	60 seconds

Statistics				
	CO2	CO	Temp	rh
Avg	529 ppm	0.0 ppm	70.2 deg F	34.5 %
Max	600 ppm	0.2 ppm	74.1 deg F	38.4 %
Max Date	04/02/2014	04/02/2014	04/02/2014	04/02/2014
Max Time	12:06:25	08:05:25	12:01:25	08:04:25
Min	501 ppm	0.0 ppm	69.1 deg F	30.5 %
Min Date	04/02/2014	04/02/2014	04/02/2014	04/02/2014
Min Time	08:38:25	08:04:25	09:16:25	12:02:25
TWA (8 hr)	270	0.0		
TWA Start Date	04/02/2014	04/02/2014		
TWA Start Time	08:03:25	08:03:25		
TWA End Time	12:08:25	12:08:25		

The Park Place Building - Floor 16

CO - April 2, 2014



APPENDIX C

PM10 – AIRBORNE DUST

The Park Place Building
Floor 16
April 2, 2014

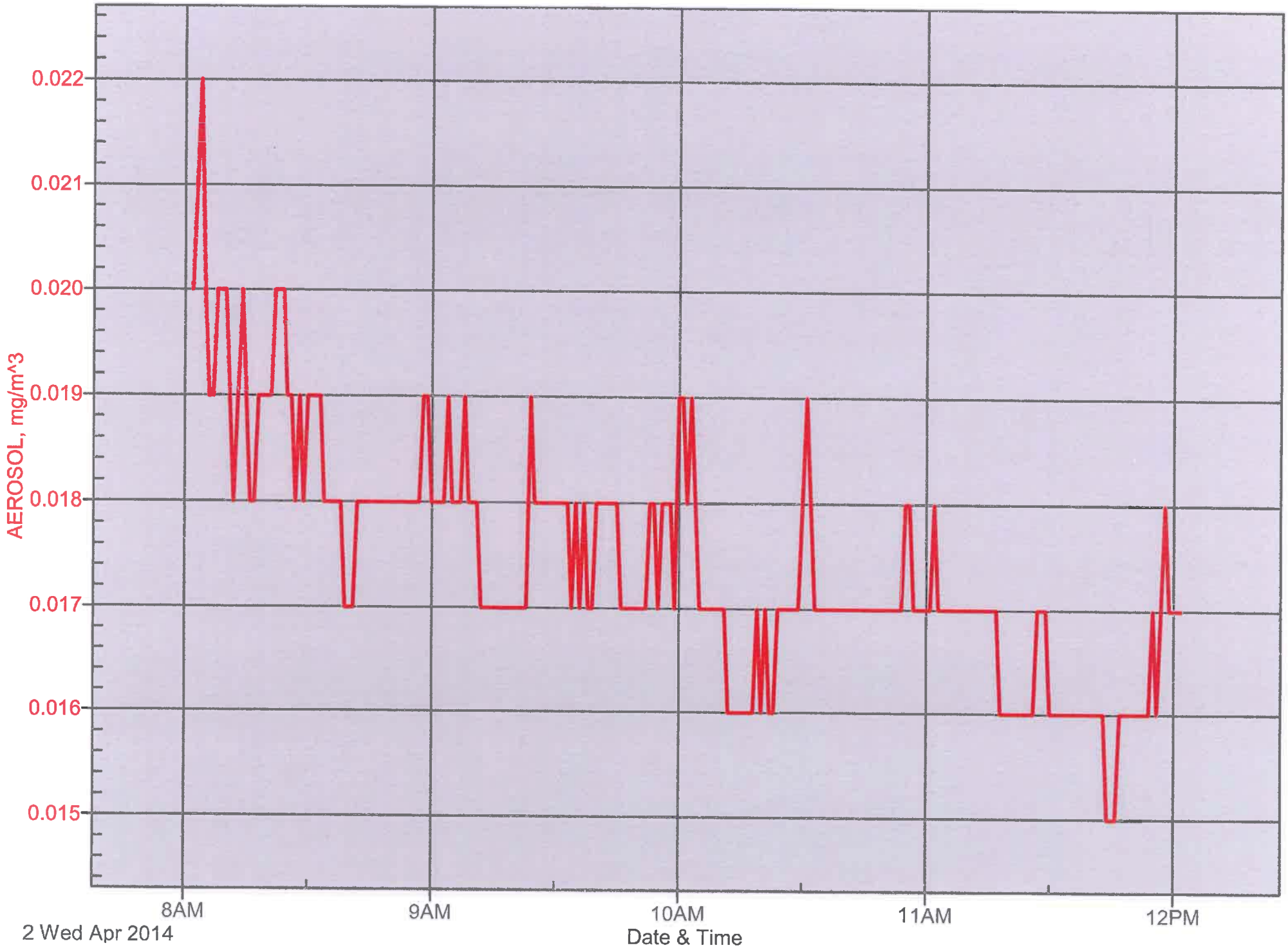
PM10

Instrument		Data Properties	
Model	DustTrak II	Start Date	04/02/2014
Instrument S/N	8530090515	Start Time	08:00:51
		Stop Date	04/02/2014
		Stop Time	12:01:51
		Total Time	0:04:01:00
		Logging Interval	60 seconds

Statistics	
	AEROSOL
Avg	0.017 mg/m^3
Max	0.022 mg/m^3
Max Date	04/02/2014
Max Time	08:03:51
Min	0.015 mg/m^3
Min Date	04/02/2014
Min Time	11:43:51
TWA (8 hr)	0.009
TWA Start Date	04/02/2014
TWA Start Time	08:00:51
TWA End Time	12:01:51

The Park Place Building - Floor 16

PM10 - April 2, 2014



APPENDIX D

INSTRUMENT CALIBRATION DATA

CERTIFICATE OF CALIBRATION AND TESTING

TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA
Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

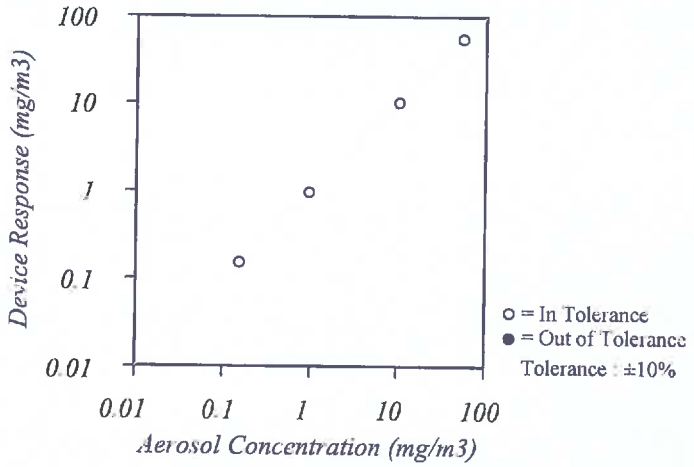
Environment Condition		
Temperature	68.5 (20.3)	°F (°C)
Relative Humidity	55	%RH
Barometric Pressure	28.54 (966.5)	inHg (hPa)

Model	**8530**
Serial Number	**8530090515**

☒ As Left ☐ As Found

☒ In Tolerance ☐ Out of Tolerance

Concentration Linearity Plot



System ID: DTII01-02

FLOW AND PRESSURE VERIFICATION — **SYSTEM DTII01-02**

Parameter	Standard	Measured	Allowable Range	Parameter	Standard	Measured	Allowable Range
Flow lpm	3.1	3.0	2.94 ~ 3.25	Pressure kPa	96.8	96.8	91.99 ~ 101.67

TSI Incorporated does hereby certify that all materials, components, and workmanship used in the manufacture of this equipment are in strict accordance with the applicable specifications agreed upon by TSI and the customer and with all published specifications. All performance and acceptance tests required under this contract were successfully conducted according to required specifications. There is no NIST standard for optical mass measurements. Calibration of this instrument performed by TSI has been done using emery oil and has been nominally adjusted to respirable mass of standard ISO 12103-1, A1 test dust (Arizona dust). Our calibration ratio is greater than 1.2:1

Measurement Variable	System ID	Last Cal.	Cal. Due
Barometric Pressure	E003733	03-12-13	03-12-14
Humidity	E002873	11-08-12	11-08-13
DC Voltage	E003315	01-02-13	01-02-14
Microbalance	M001324	01-04-13	01-04-15
2.8 um PSL	580457	n/a	n/a
Pressure	E003511	11-07-12	11-07-13

Measurement Variable	System ID	Last Cal.	Cal. Due
Temperature	E002873	11-08-12	11-08-13
DC Voltage	E003314	01-02-13	01-02-14
Photometer	E003319	02-19-13	08-19-13
1 um PSL	596913	n/a	n/a
10 um PSL	39166	n/a	n/a
Flowmeter	E002006	03-05-13	03-05-14

Calibrated

May 20, 2013
Date

TSI P/N 2300157

EHS–International, Inc.

Q-TRAK Plus CALIBRATION LOG

TSI Model 8554
Serial Number 8554-08061026
Bought new by EHSI 8/2006

Date	Calibration By	CO2	CO	Temp	RH	
01/20/12	HOLZHAUER	X	X	—	—	
6/25/12	HOLZHAUER	X	X	—	—	
12/03/12	HOLZHAUER	X	X	—	—	
2/4/13	HOLZHAUER	X	X	—	—	
3/4/13	HOLZHAUER	X	X	—	—	
6/1/13	HOLZHAUER	X	X	—	—	
7/1/13	HOLZHAUER	X	X	—	—	
7/8/13	HOLZHAUER	X	X	—	—	
1/2/14	HOLZHAUER	X 102%	X 9%	—	—	
1/21/14	HOLZHAUER	X	X	—	—	
2/4/14	HOLZHAUER	X	X	—	—	
2/10/14	HOLZHAUER	X	X	—	—	
3/20/14	HOLZHAUER	X 101%	X 9%	—	—	bump test
4/1/14	HOLZHAUER	X	X	—	—	

CO/CO2 Span Gas Lot#06-3220, filled 12/21/06
CO/CO2 Zero Gas Lot#06-3150, filled 12/22/06

APPENDIX E

PATI LABORATORY ANALYTICAL RESULTS
TVOCS AND 4-PCH

Mr. Clinton Holzhauer
EHS-International, Inc.
13228 NE 20th Street
Suite 100
Bellevue, WA 98005

April 03, 2014

DOH ELAP# 11626 Account# 13697 Login# L314886
AIHA # 100324

Dear Mr. Holzhauer:

Enclosed are the analytical results for the samples received by our laboratory on April 03, 2014. All test results meet the quality control requirements of AIHA and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. Unless otherwise requested, all samples will be discarded 14 days from the date of this report, with the exception of IOMs, which will be cleaned and disposed of after seven calendar days.

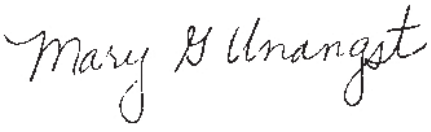
Current Scopes of Accreditation can be viewed at www.galsonlabs.com in the accreditations section under the "about Galson" tab.

Please contact Heidi Fruhlinger at (888) 432-5227, if you would like any additional information regarding this report.

Thank you for using Galson Laboratories.

Sincerely,

Galson Laboratories



Mary G. Unangst
Laboratory Director

Enclosure(s)

GALSON LABORATORIES
6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY ANALYSIS REPORT

Client : EHS-International, Inc.
Site : The Park Place Bldg
Project No. : 10605-01

Date Sampled : 02-APR-14
Date Received : 03-APR-14
Date Analyzed : 03-APR-14
Report ID : 825096

Account No.: 13697
Login No. : L314886

Formaldehyde

Sample ID	Lab ID	Time minutes	Total ug	Conc ug/m3	ppb
10605-16-F	L314886-3	240	<0.6	<20	<20

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.6 ug
Analytical Method : mod. OSHA 1007; HPLC/UV
OSHA PEL : 0.75 ppm (TWA)
Collection Media : Assay 580

Submitted by: crd/bcf
Approved by : dnf
Date : 03-APR-14 NYS DOH # : 11626
QC by: Tom Burgess

< -Less Than
> -Greater Than
NA -Not Applicable
mg -Milligrams
ug -Micrograms
ND -Not Detected
m3 -Cubic Meters
l -Liters
ppm -Parts per Million
kg -Kilograms
NS -Not Specified

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LABORATORY ANALYSIS REPORT

Client : EHS-International, Inc.
Site : The Park Place Bldg
Project No. : 10605-01

Date Sampled : 02-APR-14
Date Received : 03-APR-14
Date Analyzed : 03-APR-14
Report ID : 825152

Account No.: 13697
Login No. : L314886

Galson ID: L314886-1
Client ID: 10605-16-T

	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3
Propylene	5.0	8.6	<5.0	<8.6
Freon-12	5.0	25	<5.0	<25
Chloromethane	5.0	10	<5.0	<10
Freon-114	5.0	35	<5.0	<35
Vinyl Chloride	5.0	13	<5.0	<13
1,3-Butadiene	5.0	11	<5.0	<11
Bromomethane	5.0	19	<5.0	<19
Chloroethane	5.0	13	<5.0	<13
Vinyl Bromide	5.0	22	<5.0	<22
Freon-11	5.0	28	<5.0	<28
Isopropyl Alcohol	25	61	<25	<61
Acetone	25	59	<25	<59
1,1-Dichloroethene	5.0	20	<5.0	<20
Methylene Chloride	5.0	17	<5.0	<17
Freon-113	5.0	38	<5.0	<38
Allyl Chloride	5.0	16	<5.0	<16
Carbon Disulfide	10	31	<10	<31
Trans-1,2-Dichloroethene	5.0	20	<5.0	<20
Methyl Tert-Butyl Ether	5.0	18	<5.0	<18
1,1-Dichloroethane	5.0	20	<5.0	<20
Vinyl Acetate	5.0	18	<5.0	<18

Analytical Method : mod. OSHA PV2120/mod. EPA
Collection Media : Mini Can

Submitted by: BHB
Approved by : nkp
Date : 03-APR-14 NYS DOH # : 11626
QC by : Tom Burgess

< -Less Than	MG -Milligrams	M3 -Cubic Meters
> -Greater Than	UG -Micrograms	L -Liters
NA -Not Applicable	ND -Not Detected	ppbv-Parts per Billion Volume
NS -Not Specified	KG -Kilograms	LOQ -Limit of Quantitation

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Project No. : 10605-01

Date Sampled : 02-APR-14
Date Received : 03-APR-14
Date Analyzed : 03-APR-14
Report ID : 825152

Account No.: 13697
Login No. : L314886

Galson ID: L314886-1
Client ID: 10605-16-T

	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3
Methyl Ethyl Ketone	5.0	15	<5.0	<15
cis-1,2-Dichloroethylene	5.0	20	<5.0	<20
Hexane	5.0	18	<5.0	<18
Ethyl Acetate	5.0	18	<5.0	<18
Chloroform	5.0	24	<5.0	<24
Tetrahydrofuran	5.0	15	<5.0	<15
1,2-Dichloroethane	5.0	20	<5.0	<20
1,1,1-Trichloroethane	5.0	27	<5.0	<27
Cyclohexane	5.0	17	<5.0	<17
Carbon Tetrachloride	5.0	31	<5.0	<31
Benzene	5.0	16	<5.0	<16
1,4-Dioxane	20	72	<20	<72
2,2,4-Trimethylpentane	5.0	23	<5.0	<23
Heptane	5.0	20	<5.0	<20
1,2-Dichloropropane	5.0	23	<5.0	<23
Trichloroethylene	5.0	27	<5.0	<27
Bromodichloromethane	5.0	34	<5.0	<34
cis-1,3-Dichloropropene	5.0	23	<5.0	<23
trans-1,3-Dichloropropene	5.0	23	<5.0	<23
1,1,2-Trichloroethane	5.0	27	<5.0	<27
Toluene	5.0	19	<5.0	<19

Analytical Method : mod. OSHA PV2120/mod. EPA
Collection Media : Mini Can

Submitted by: BHB
Approved by : nkp
Date : 03-APR-14 NYS DOH # : 11626
QC by : Tom Burgess

< -Less Than
> -Greater Than
NA -Not Applicable
NS -Not Specified
MG -Milligrams
UG -Micrograms
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KG -Kilograms
M3 -Cubic Meters
L -Liters
ppbv-Parts per Billion Volume
LOQ -Limit of Quantitation

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Project No. : 10605-01

Date Sampled : 02-APR-14
Date Received : 03-APR-14
Date Analyzed : 03-APR-14
Report ID : 825152

Account No.: 13697
Login No. : L314886

Galson ID: L314886-1
Client ID: 10605-16-T

	LOQ ppbv	LOQ ug/m3	ppbv	ug/m3
Dibromochloromethane	5.0	43	<5.0	<43
Methyl Isobutyl Ketone	20	82	<20	<82
Methyl Butyl Ketone	20	82	<20	<82
1,2-Dibromoethane	5.0	38	<5.0	<38
Tetrachloroethylene	5.0	34	<5.0	<34
Chlorobenzene	5.0	23	<5.0	<23
Ethylbenzene	5.0	22	<5.0	<22
Bromoform	5.0	52	<5.0	<52
m & p-xylene	10	43	<10	<43
Styrene	5.0	21	<5.0	<21
o-Xylene	5.0	22	<5.0	<22
1,1,2,2-Tetrachloroethane	5.0	34	<5.0	<34
4-Ethyltoluene	5.0	25	<5.0	<25
1,3,5-Trimethylbenzene	5.0	25	<5.0	<25
1,2,4-Trimethylbenzene	5.0	25	<5.0	<25
1,3-Dichlorobenzene	5.0	30	<5.0	<30
Benzyl Chloride	5.0	29	<5.0	<29
1,4-Dichlorobenzene	5.0	30	<5.0	<30
1,2-Dichlorobenzene	5.0	30	<5.0	<30
Total Volatile Organics				ND

Analytical Method : mod. OSHA PV2120/mod. EPA
Collection Media : Mini Can

Submitted by: BHB
Approved by : nkp
Date : 03-APR-14 NYS DOH # : 11626
QC by : Tom Burgess

< -Less Than	MG -Milligrams	M3 -Cubic Meters
> -Greater Than	UG -Micrograms	L -Liters
NA -Not Applicable	ND -Not Detected	ppbv-Parts per Billion Volume
NS -Not Specified	KG -Kilograms	LOQ -Limit of Quantitation

LABORATORY ANALYSIS REPORT

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FAX: (315) 437-0571
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Client : EHS-International, Inc.
Site : The Park Place Bldg
Project No. : 10605-01

Date Sampled : 02-APR-14
Date Received : 03-APR-14
Date Analyzed : 03-APR-14
Report ID : 825154

Account No.: 13697
Login No. : L314886

Client ID : 10605-16-T **Lab ID : L314886-1**

Tentatively Identified Compounds	CAS Number	Retention Time	Estimated Concentration ppbv	Estimated Concentration ug/m3
No Volatiles Found			0.0	0.0
Total VOC's				ND

Analytical Method : mod. OSHA PV2120/mod. EPA
Collection Media : Mini Can

Submitted by: BHB
Approved by : nkp
Date : 03-APR-14 NYS DOH # : 11626
QC by: Tom Burgess

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms
> -Greater Than ug -Micrograms l -Liters LOQ -Limit of Quantitation
NA -Not Applicable ND -Not Detected NS -Not Specified ppbv-Parts per Billion Volume

Field sampling was not performed by Galson. Galson presents results based on sampling data provided by clients.

GALSON LABORATORIES

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.galsonlabs.com

LABORATORY ANALYSIS REPORT

Client : EHS-International, Inc.
Site : The Park Place Bldg
Project No. : 10605-01

Date Sampled : 02-APR-14
Date Received : 03-APR-14
Date Analyzed : 03-APR-14
Report ID : 825154

Account No.: 13697
Login No. : L314886

LEED TESTING RESULTS

Sample ID	Lab ID	TVOCs ug/m3
10605-16-T	L314886-1	230

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LABORATORY ANALYSIS REPORT

Client : EHS-International, Inc.
Site : The Park Place Bldg
Project No. : 10605-01

Date Sampled : 02-APR-14
Date Received : 03-APR-14
Date Analyzed : 03-APR-14
Report ID : 825163

Account No.: 13697
Login No. : L314886

4-Phenylcyclohexene

Sample ID	Lab ID	Air Vol liter	Front ug	Back ug	Total ug	Conc ug/m3	ppb
10605-16-PC	L314886-2	48	<0.2	<0.2	<0.2	<4	<0.7

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.2 ug
Analytical Method : mod. NIOSH 1501; GC/PID
OSHA PEL (TWA) : NA
Collection Media : 226-01

Submitted by: KAG
Approved by : nkp
Date : 03-APR-14 NYS DOH # : 11626
QC by: Tom Burgess

< -Less Than
> -Greater Than
NA -Not Applicable
mg -Milligrams
ug -Micrograms
ND -Not Detected
m3 -Cubic Meters
l -Liters
ppm -Parts per Million
kg -Kilograms
NS -Not Specified

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LABORATORY FOOTNOTE REPORT

Client Name : EHS-International, Inc.
Site : The Park Place Bldg
Project No. : 10605-01

Date Sampled : 02-APR-14 Account No.: 13697
Date Received: 03-APR-14 Login No. : L314886
Date Analyzed: 03-APR-14

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceeding the final result column may have been rounded in order to fit the report format and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

L314886 (Report ID: 825096):
SOPs: LC-SOP-4(13)
Total ug corrected for a desorption efficiency of 94%.
Formaldehyde results have been corrected for the average background found on the media:
0.1022 ug for lot#9A13.

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2).
The estimated uncertainty applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process.

Parameter	Accuracy	Mean Recovery
Formaldehyde	+/-7.3%	97.4%

L314886 (Report ID: 825152):
SOPs: in-vocs(26)

L314886 (Report ID: 825154):
Tentatively Identified Compounds (TICS) are estimated values. TICS are calculated using an average response factor of 1 for all compounds.
SOPs: in-vocs(26)

L314886 (Report ID: 825163):
Total ug corrected for a desorption efficiency of 97%.
SOPs: GC-SOP-12(6), GC-SOP-16(11), GC-SOP-8(10)

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2).
The estimated uncertainty applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process.

Parameter	Accuracy	Mean Recovery
4-Phenylcyclohexene	+/-18.7%	95.3%

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms
> -Greater Than ug -Micrograms l -Liters NS -Not Specified
NA -Not Applicable ND -Not Detected ppm -Parts per Million

GALSON LABORATORIES

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East Syracuse, NY 13057-9672
Tel: 315-432-5227
888-432-5227
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www.galsonlabs.com

298797

☐ New Client?

Report To*: Clinton Holzhauer
EHS-International, Inc.
13228 NE 20th St. STE100
Belleme, WA 98005

Client Account No.*:

Phone No.*: 425-455-2959
Cell No.: 425-766-5697
Email Results To: clintonh@ehsintl.com
Email Address: ↗

Invoice To*: Shelby McClure
SAME

Phone No.: 425-455-2959
Email: shelbyN@ehsintl.com
Purchase Order No.: 10605-16
Credit Card: ☐ Credit Card on File ☐ Call for Credit Card Info

☐ Samples submitted using the FreePumpLoan™ Program.
☑ Samples submitted using the FreeSamplingBadges™ Program.

Need Results By*:	(surcharge)
☐ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☒ Same Day	200%

Site Name: The Park Place Bldg Project: 10605-01 Sampled By: HOLZHAUER

Comments: LEED sampling

Covers Removed (2)

R4

List description of industry or process/interferences present in sampling area:

State samples were collected in (ex. NY): WA

Please indicate which OEL this data will be used for:
☐ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☒ Other (specify): LEED

Sample Identification* (Maximum of 20 characters, ID's longer than 20 characters will be abbreviated.)	Date Sampled* (mm/dd/yy)	Collection Medium	Sample Volume, Sample Time, or Sample Area*	Sample Units*: L, ml, min., in2, cm2, ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (ex. welding, plating, painting, etc.)*
Example	01/01/11	2pc UW PVC	960	L	Hexavalent Chromium (Cr6)	mod. OSHA ID-215	Welding
10605-16-T WA6036 WE634	04/02/14	1L SUMMA	1.0	L	TVOC (for LEED)	mod. TO-15/OSHA	PV2120
10605-16-PC	04/02/14	SKC 226-001	48.0	L	4-PCH (for LEED)	mod. NIOSH 1501	
10605-16-F	04/02/14	NIOSH Assay	240	min.	Formaldehyde (LEED)	mod. OSHA 1007	

^Galson Laboratories will substitute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☐ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ please indicate if the lower LOQ is required (only available for certain analytes see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)*:

Chain of Custody	Print Name/Signature	Date/Time		Print Name/Signature	Date/Time
Relinquished by:	Clinton Holzhauer - Clinton Holzhauer for Ex	4/2/14 12:30p	Received by:		
Relinquished by:			Received by:	M. Krause / M. Krause	4/3/14 0748

Samples received after 3pm will be considered as next day's business.
*Required fields, failure to complete these fields may result in a delay in your samples being processed.

LAB ORIGINAL

APPENDIX F

EHSI LEED SAMPLING FORM

FIELD DATA SHEET

EHS-International, Inc.

LEED SAMPLING FORM

Project Location: The Park Place Building
EHSI Project No: 10605-01
Technician C. Holzhauer
Date April 2, 2014

Location #: FL. 16; side side cubicle area (J/K @ 12/13)
Comments cubicles complete; unoccupied; door closed
minor touch-up painting remains on perimeter under window unit on W side of area

CO :
Start 8:00a Finish 12:05p Q-Trak # 0231
Log # Log 001
Comments:

PM10 :
Start 8:00 am Finish 12:01p Dust Trak # 0391
Log # Log 002
Comments:

TVOC:
Sample ID: 10605-16-T
Start 8:00 am Finish 12:00p Canister# WA620 Regulator # WR634
Initial Pressure (in Hg): -29.0 Final Pressure (in Hg): -04.0" Hg
Comments: 1 L SUMMA; filled remainder w/ "grab sample"

4-PCH:
Sample ID: 10605-16-PC
Start 8:00a Finish 12:00 pm Pump# 0709
Initial Flow (LPM): 0.20 Final Flow: 0.20 Ave. Flow: 0.20
Comments: SKC 226-001; LOT 2000

Formaldehyde: (Passive Badge)
Sample ID: 10605-16-F (9A13-KE0117)
Start 8:00a Finish 12:00pm
Comments: LOT 580AT9A13; 2 faces open

APPENDIX G

LETTER FROM MACDONALD-MILLER FACILITY SOLUTION REGARDING CONDITION OF HVAC DURING TESTING

MacDonald-Miller
FACILITY SOLUTIONS®

April 2, 2014

Brian Morant
Hermanson Company LLC
1221 2nd Ave N
Kent, WA 98032

Subject: IAQ Building Ventilation

Dear Brian:

This letter is to confirm that the Park Place building ventilation system has been returned to normal building occupied mode for Level 16 the morning of April 2nd. The system was released back to "Auto" at 7:30 AM today and is ready for IAQ Testing. The system will continue to provide minimum OSA during normal occupied schedule until 6:00 PM.

Regards,

Brian Wheeler

Brian Wheeler
System Specialist
MacDonald-Miller Facility Solutions
206-768-4064